

Reichhold Chemicals, Inc.

Treated Fiber Products
2340 Taylor Way
P.O. Box 1482
Tacoma, Washington 98401

REICHHOLD

January 7, 1993

SEA21487.LT

Chief, Waste Management Branch
U.S. Environmental Protection Agency, Region X
1200 Sixth Avenue
Seattle, Washington 98101

Gentlemen:

Subject: Offsite Intermediate Aquifer Extraction System
Reichhold Chemicals, Inc., Tacoma, Washington
3320 Lincoln Avenue
Tacoma, Washington

In accordance with Section I.N.(1) of the RCRA Permit (WAD 009 252 891), this letter certifies that the Offsite Intermediate Aquifer Extraction System has been constructed at Reichhold Chemicals, Inc., Tacoma, Washington, in compliance with the Permit. The Offsite Intermediate Aquifer Extraction System was originally described in the Reichhold technical memorandum titled "Technical Memorandum, Reichhold Chemicals, Inc., Tacoma, Washington, Description and Design Assumptions for Expedited Action, Offsite Intermediate Aquifer Extraction Wells, and Sanitary Sewer," dated December 29, 1988.

The Offsite Intermediate Aquifer Extraction System was originally included in RCI's Design Package 2. That package was executed in 1988 without the offsite extraction wells phase due to delays in easement negotiations with the Puyallup Indian Tribe and the Port of Tacoma.

Previous letters to EPA discussed minor revisions to the original 1988 design. The letter dated May 29, 1992, discussed typical changes to the original design. That letter was attached to Design Package 10, Offsite Extraction Wells, which was submitted for EPA review on that date. The letter dated August 5, 1992, summarized additional measures RCI planned on implementing in the design, construction, and operation of the system to address EPA's concerns resulting from their review of Design Package 10.

Chief, Waste Management Branch

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The Offsite Intermediate Aquifer Extraction System was constructed with only minor changes (e.g., shifting of the pipe alignment a few feet within the easement, railroad undercrossing configuration, wellhead piping configuration, etc.). As required by Section II.A.(3) of the Permit, enclosed are the final record drawings for the Offsite Intermediate Aquifer Extraction System with additions/deletions/changes for the original construction noted. The noted additions/deletions/changes on the record drawings have cloud symbols drawn around them. In the case of deletions the cloud is empty. For a summary of what was deleted without having to reference the construction drawings, see Table 1. The rationale for these minor deviations are based on normal construction methods and materials availability.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



John Oldham
Tacoma Site Manager
Riechhold Chemicals, Inc.
January 6, 1993



Lauri J. Gorton, P.E.
CH2M HILL Northwest, Inc.
January 6, 1993

Attachment
bp/seaE8/044.51

cc: Dave Bartus/EPA
Executive Director/Port of Tacoma
Puyallup Tribe of Indians

Table 1
Summary of Deletions

Sheet	Detail	Deletion
4	Plan-Center	<ul style="list-style-type: none"> • Clean outs • (2) Concrete encasement notes
4	Profile-Center	<ul style="list-style-type: none"> • Existing waterline • Concrete encasements • Reference to Alexander Avenue pavement restoration
5	3	Floor sleeve
5	4	Rubber sleeve
5	A	<ul style="list-style-type: none"> • Floor sleeve • ½ premolded joint filler
6	2	Notes and references to a precast railroad undercrossing
11	3	Grounding rod and strap

REICHHOLD CHEMICALS, INC. TACOMA, WASHINGTON

INTERIM CORRECTIVE ACTION PACKAGE NO. 10

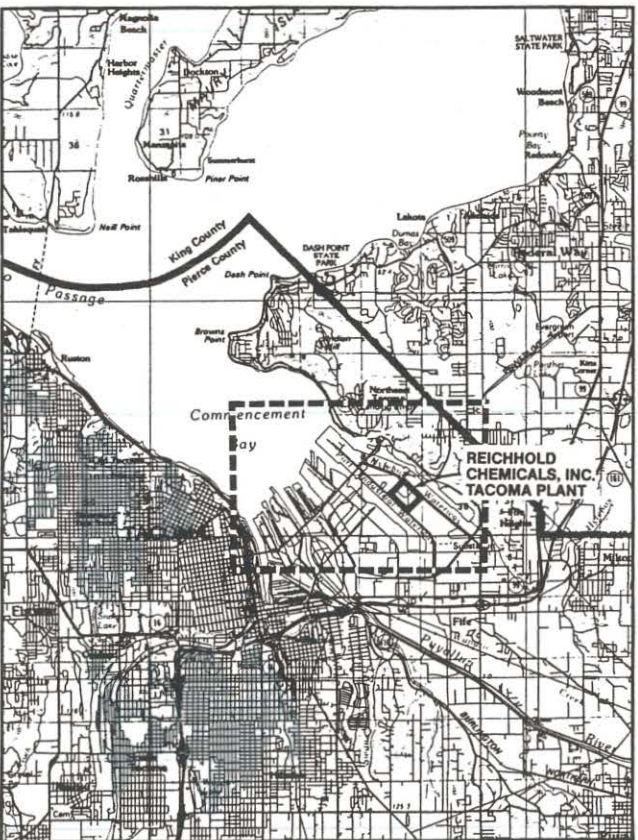
EXTRACTION WELLS

WA 2891
15B
5/92

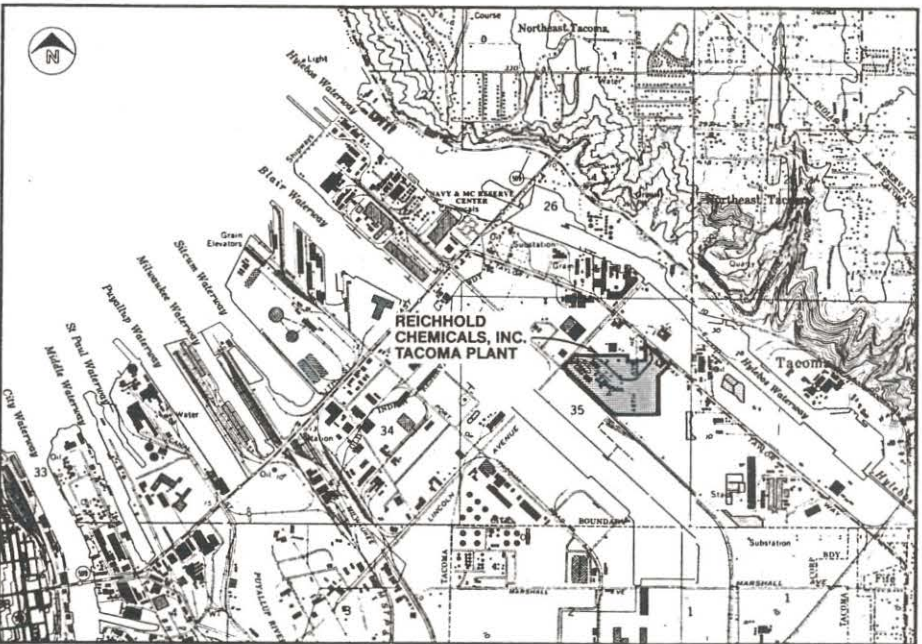
DRAWING INDEX

SHEET	TITLE
1	TITLE AND VICINITY MAP
2	LEGEND - MECHANICAL, CIVIL
3	GENERAL SITE PLAN
* 4	PLAN AND PROFILE
* 5	WELL DETAILS
* 6	PIPELINE DETAILS
7	ELECTRICAL LEGEND
* 8	ELECTRICAL ONE LINE AND ELEMENTARY DIAGRAM
* 9	ELEMENTARY DIAGRAM
* 10	ELEMENTARY DIAGRAM
* 11	ELECTRICAL DETAILS
12	INSTRUMENTATION AND CONTROL LEGEND
13	I/O BASE CONFIGURATION
14	POWER DISTRIBUTION IN FP-100 AND FP-4T1
* 15	POWER DISTRIBUTION FP-EW-10
* 16	FIELD PANEL FP-EW-10 PANEL ELEVATION
* 17	FLOW CONTROL EW 4
* 18	FLOW CONTROL EW 10
* 19	WELL CONTROL EW 4
* 20	WELL CONTROL EW 10

* INFORMATION REGARDING CORRECTIONS
FOR RECORD DRAWINGS PROVIDED
BY REICHOLD CHEMICALS, INC.



TACOMA VICINITY MAP



PORT OF TACOMA
LOCATION MAP

RECORD DRAWINGS

Revisions Drawn by C.S. JOHNSON Date 12-24-92

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.



DSGN J. BROWN
OR J. BROWN
CHK G. VEDERA
APVD L. GORTON

12-24-92 RECORD DRAWING

CSJ RJ

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VERIFY SCALES
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REICHOLD CHEMICALS, INC.
TACOMA, WASHINGTON
INTERIM CORRECTIVE ACTION

PACKAGE NO. 10 OFFSITE EXTRACTION WELLS

TITLE AND VICINITY MAP

SHEET 1
DWG NO.
DATE MAY 1992
PROJ NO. SEA21487.LT

NOTES:

GENERAL PIPING NOTES

1. LAY PIPE TO UNIFORM GRADE BETWEEN INDICATED ELEVATION POINTS.
2. SIZE OF FITTINGS SHOWN ON PLANS SHALL CORRESPOND TO ADJACENT STRAIGHT RUN OF PIPE, UNLESS OTHERWISE INDICATED. TYPE OF JOINT AND FITTING MATERIAL SHALL BE THE SAME AS SHOWN FOR ADJACENT STRAIGHT RUN OF PIPE.
3. LOCATION AND NUMBER OF PIPE HANGERS AND PIPE SUPPORTS SHOWN IS ONLY APPROXIMATE. FINAL SUPPORT REQUIREMENTS SHALL BE DETERMINED IN THE FIELD AND REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION. MAXIMUM SPACING SHALL BE AS SPECIFIED.
4. NOT USED.
5. NUMBER AND LOCATION OF UNIONS SHOWN ON PLANS IS ONLY APPROXIMATE. PROVIDE ALL UNIONS NECESSARY TO FACILITATE REMOVAL OF VALVES AND MECHANICAL EQUIPMENT.
6. SYMBOLS, LEGENDS, AND PIPE USE IDENTIFICATIONS SHOWN SHALL BE FOLLOWED THROUGHOUT THE PLANS, WHEREVER APPLICABLE. NOT ALL OF THE VARIOUS PIPING COMPONENTS ARE NECESSARILY USED IN THE PROJECT.

PIPING SYMBOLS

	EXISTING PIPE
	NEW PIPE
	EXISTING PIPE TO BE ABANDONED
	EXISTING PIPE TO BE REMOVED
	ANCHOR
	CAP
	ELBOW, 90 DEGREE
	ELBOW UP
	ELBOW DOWN
	CROSS
	TEE
	TEE UP
	TEE DOWN
	ELBOW, 45 DEGREE
	LATERAL
	LATERAL UP
	LATERAL DOWN
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	UNION

VALVE SYMBOLS

	GATE
	BUTTERFLY
	GLOBE
	BALL
	PLUG OR COCK
	NEEDLE
	SWING CHECK
	BALL CHECK

UTILITY AND SITE LEGEND

EXISTING

	PUMP STATION
	SANITARY SEWER WITH MANHOLE
	PRESSURE SEWER
	STORM SEWER WITH CATCH BASIN AND MANHOLE
	IRRIGATION PIPELINE
	WATER PIPELINE WITH FIRE HYDRANT AND VALVE
	GAS PIPELINE
	UNDERGROUND POWER CABLE
	UNDERGROUND TELEPHONE CABLE
	UNDERGROUND TELEVISION CABLE
	CULVERT WITH SIZE AND TYPE
	FENCE LINE
	UTILITY POLE WITH GUY ANCHOR

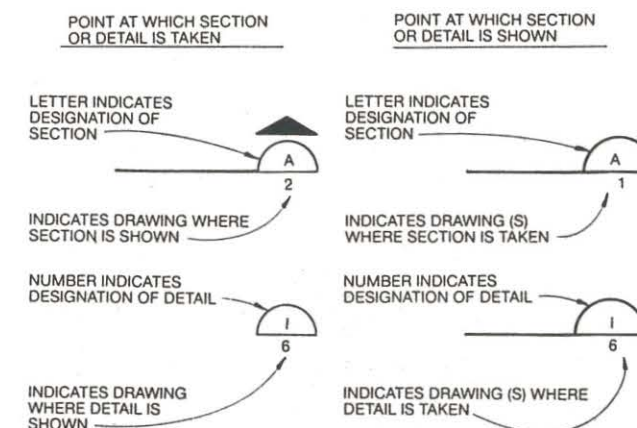
NEW

	PUMP STATION
	MANHOLE DESIGNATION
	GRAVITY SEWER WITH MANHOLE
	PRESSURE SEWER (DASHED PLAN ONLY)
	SURFACE RESTORATION ZONE
	BACKFILL CLASSIFICATION
	SIZE AND SLOPE OF PIPE (8" PIPE AT 0.0040 FT/FT)
	TRENCH WIDTH RESTRICTION
	ELECTRICAL CABLE
	CONTROL CABLE

GENERAL

	RIGHT-OF-WAY AND/ OR PROPERTY LINE
	TAX LOT NUMBER
	EASEMENT LINE
	WIDTH OF PERMANENT EASEMENT
	WIDTH OF TEMPORARY EASEMENT
	EASEMENT NUMBER
	DITCH SHOWING DIRECTION OF FLOW
	CREEK OR RIVER SHOWING DIRECTION OF FLOW
	EXISTING GRADE
	FINISH GRADE
	EXISTING CONTOUR
	NEW CONTOUR
	MONITORING WELL
	EXTRACTION WELL

SECTION AND DETAIL DESIGNATION



- NOTES:
1. SYMBOL, LEGEND, AND USE IDENTIFICATION WHICH ARE SHOWN ON THIS DRAWING ARE FOLLOWED THROUGHOUT THE PLANS WHENEVER APPLICABLE. ALL OF THE VARIOUS SYMBOLS, LEGENDS AND USE IDENTIFICATIONS ARE NOT NECESSARILY UTILIZED IN THE PROJECT.

RECORD DRAWINGS

Revisions Drawn by C.S. JOHNSON Date 12-24-92

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PACKAGE NO. 10 OFFSITE EXTRACTION WELLS

LEGEND
MECHANICAL, CIVIL

SHEET 2
DWG NO.
DATE MAY 1992
PROJ NO. SEA21487.1T

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TACOMA, WASHINGTON
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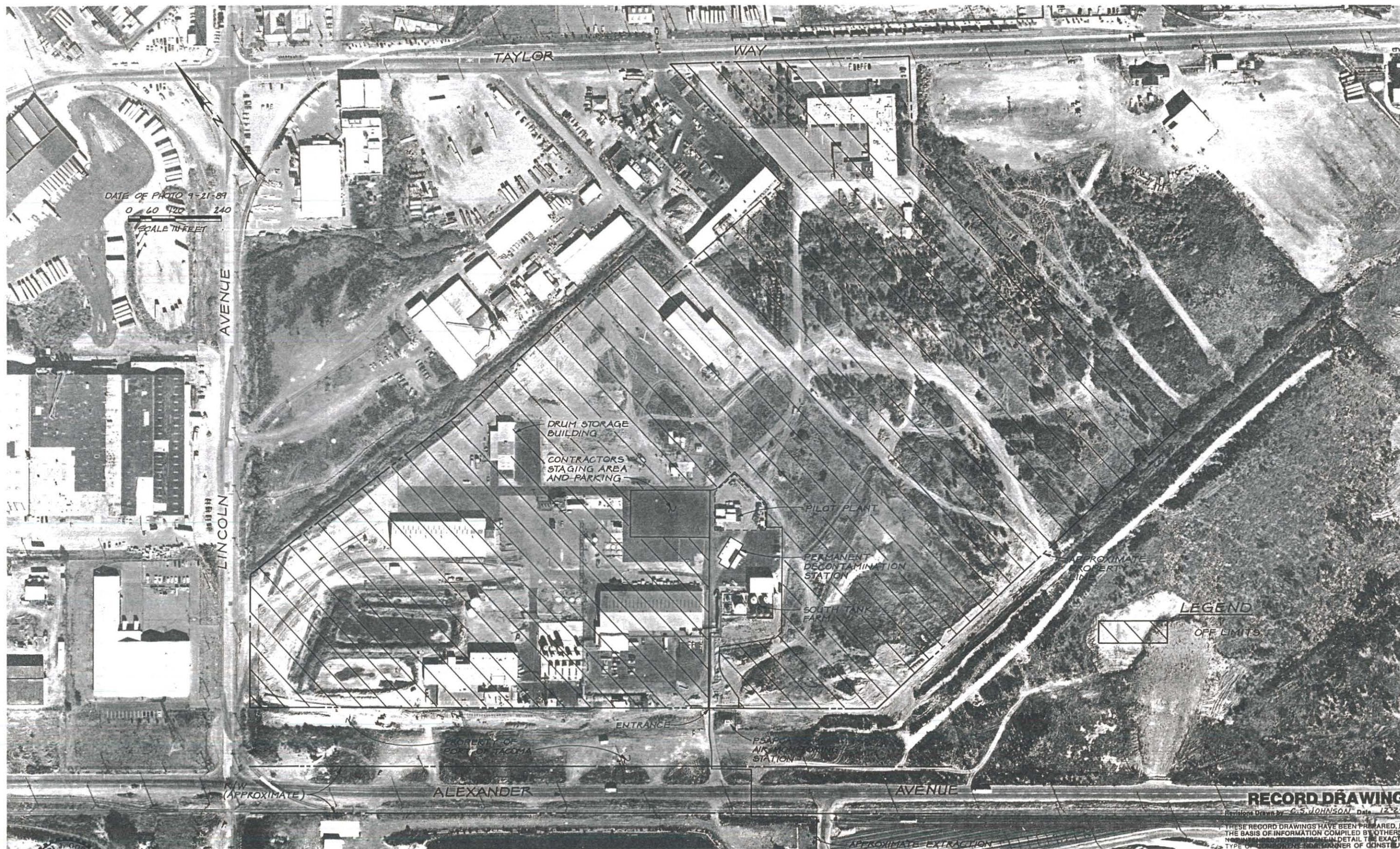


DSGN CLARK COSBY
OR CLARK COSBY
CHK G. VEDERA
APVD L. GORTON

122442 RECORD DRAWING

CSJ RJ

BY APVD CH2M HILL



LEGEND

OFF LIMITS

RECORD DRAWINGS

Revisions Drawn by C.S. JOHNSON Date 12-24-92

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DSGN G. VEDERA
DR J. BROWN
CHK J. BAISANO
APVD L. GORDON

NO. 1224-92
DATE RECORD DRAWING

REVISION

CSJ RU
BY APVD

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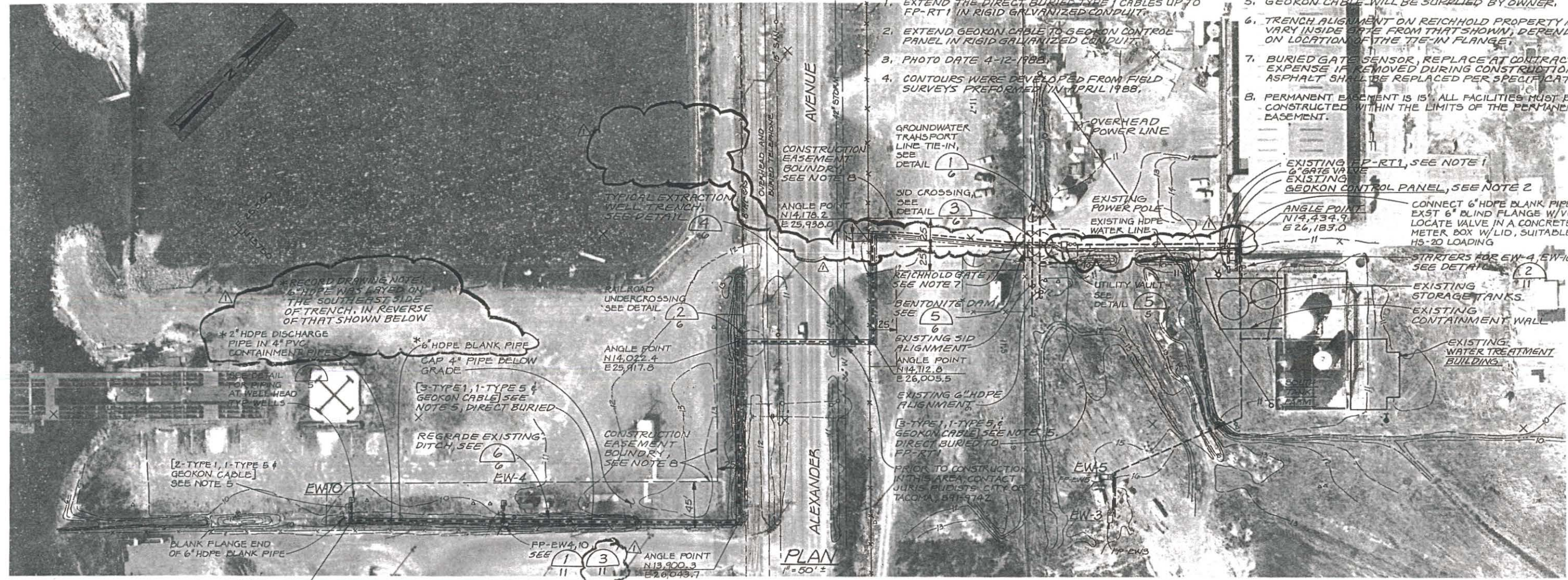
REICHOLD CHEMICALS, INC.
TACOMA, WASHINGTON
INTERIM CORRECTIVE ACTION

PACKAGE NO. 10 OFFSITE EXTRACTION WELLS

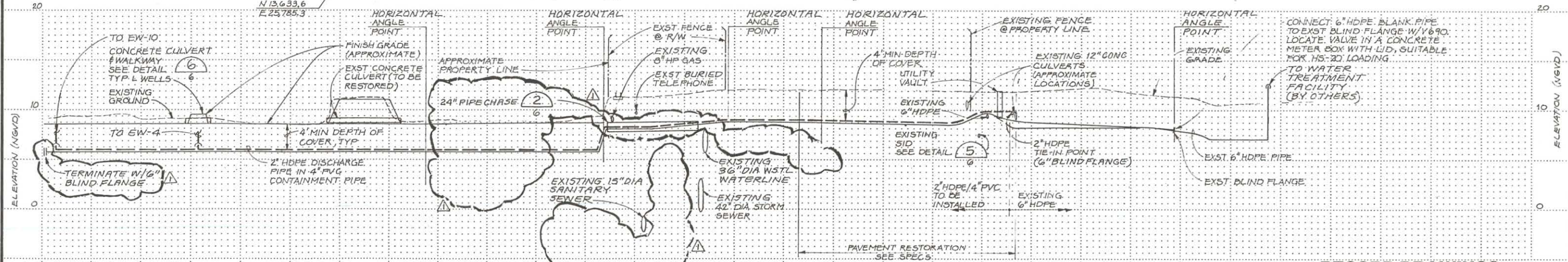
GENERAL SITE PLAN

SHEET 3

DWG NO.
DATE MAY 1992
PROJ NO. SEA21487 MM



- NOTES:**
1. EXTEND THE DIRECT BURIED TYPE 1 CABLES UP TO FP-RT1 IN RIGID GALVANIZED CONDUIT.
 2. EXTEND GEOKON CABLE TO GEOKON CONTROL PANEL IN RIGID GALVANIZED CONDUIT.
 3. PHOTO DATE 4-12-1988.
 4. CONTOURS WERE DEVELOPED FROM FIELD SURVEYS PERFORMED IN APRIL 1988.
 5. GEOKON CABLE WILL BE SUPPLIED BY OWNER.
 6. TRENCH ALIGNMENT ON REICHOLD PROPERTY MAY VARY INSIDE GATE FROM THAT SHOWN, DEPENDING ON LOCATION OF THE TIE-IN FLANGE.
 7. BURIED GATE SENSOR, REPLACE AT CONTRACTORS EXPENSE IF REMOVED DURING CONSTRUCTION. ASPHALT SHALL BE REPLACED PER SPECIFICATIONS.
 8. PERMANENT EASEMENT IS 15'. ALL FACILITIES MUST BE CONSTRUCTED WITHIN THE LIMITS OF THE PERMANENT EASEMENT.



RECORD DRAWINGS

Revisions Drawn by: C.S. JOHNSON Date: 12-24-92
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DSGN: D. RICHARDSON
 DR: J. BROWN
 CHK: G. VEDERA
 APVD: L. GORTON

NO. 12-24-92
 DATE 12-24-92
 RECORD DRAWING

CSJ AJ
 BY APVD
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 TACOMA, WASHINGTON
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PACKAGE NO. 10 OFFSITE EXTRACTION WELLS
 PLAN AND PROFILE

SHEET 4
 DATE MAY 1992
 PROJ NO. SEA21487.LT